

**Notes:**

- All statutory undertakers equipment in footway and carriageway to be located and diverted before work commences.
- A pedestrian route through the works shall be maintained at all times and clearly defined by suitable barriers and lights where necessary.
- The contractor is obliged to obtain necessary road opening and/or sewer connection licence's prior to commencement of the works.
- One vertical joint per course of brick work shall be left open to allow drainage during construction.
- All statutory undertakers covers and frames to be adjusted to suit new carriageway levels prior to surfacing.
- All existing gullies and drain runs to be cleaned of detritus and high pressure water jetted prior to commencement of works.
- The existing sewers and culverts shown on this drawing are taken from various archives, drainage plans and sewer records. Some of this information is contradictory and the locations shown are interpreted using existing features and manhole locations shown on the survey. The exact depth and location should be verified on-site prior to commencing construction.
- All adoptable sewer works and material to be in accordance with Codes for Adoption and the Water Authorities requirements and Kitemarked.
- Gullies should not be located in the area of dropped crossings.
- Sewers to be laid in Class 'S' bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provided above granular bed and surround. Refer to Codes for Adoption for protection measures.
- Granular bedding for pipes shall consist of aggregates from natural sources complying with the relevant provisions of BS 882 sized in accordance with the table across.
- All pipes with a diameter larger or equal to 375mm shall be concrete. Pipes with a diameter less than 375mm shall be clay, ductile iron or plastic.
- Vitrified clay pipes and fittings for sewers shall have flexible mechanical joints. Pipes for foul Sewers and surface water Sewers shall comply with relevant requirements of BS EN295 and BS 65 (surface water pipes only).
- Filled ground must be filled and consolidated under the supervision and to the satisfaction of the Water Authority before any sewer works are carried out.
- Sulphate Resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- Sewers must have 5.0m clearance from trees and hedges. (refer to Codes for Adoption for restrictions on tree planting adjacent to sewers).
- All private work to be in accordance with current building regulations.
- Drains passing through buildings to be protected with lintel cover.
- No building to take place within 3.0m of an adoptable sewer.
- No services to be sited over or within 1.0m of an adoptable sewer.
- Private drainage connections not direct to manholes are to be made via a 45 degree junction and not saddles.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
- Any proposed sewers located within 5 meters of the public sewer shall be ductile iron pipe work.
- Any manholes which are being retained within the bus apron to be replaced with E600 covers and frame.
- Downpipe to connect into proposed system. Exact detail to be confirmed at RIBA stage 4.

**THE BUS STATION LAYOUT SHOWN ON THIS PLAN IS TAKEN FROM AHR ARCHITECTS LTD PROPOSED GA FLOOR PLAN DRAWING REF. FloorPlan-2010-StructuralGridSettingOut. INFORMATION HAS ONLY BEEN PROVIDED IN ACAD ( NO DRAWING BORDERS INCLUDED) INFORMATION RECEIVED 16/04/24**

**THE TOPOGRAPHICAL SURVEY SHOWN ON THIS PLAN IS TAKEN FROM MET GEO ENVIRONMENTAL P23-00376-MET-EXT-XX-TOP-M2-G-1 REV 01 DATED 21/02/24**

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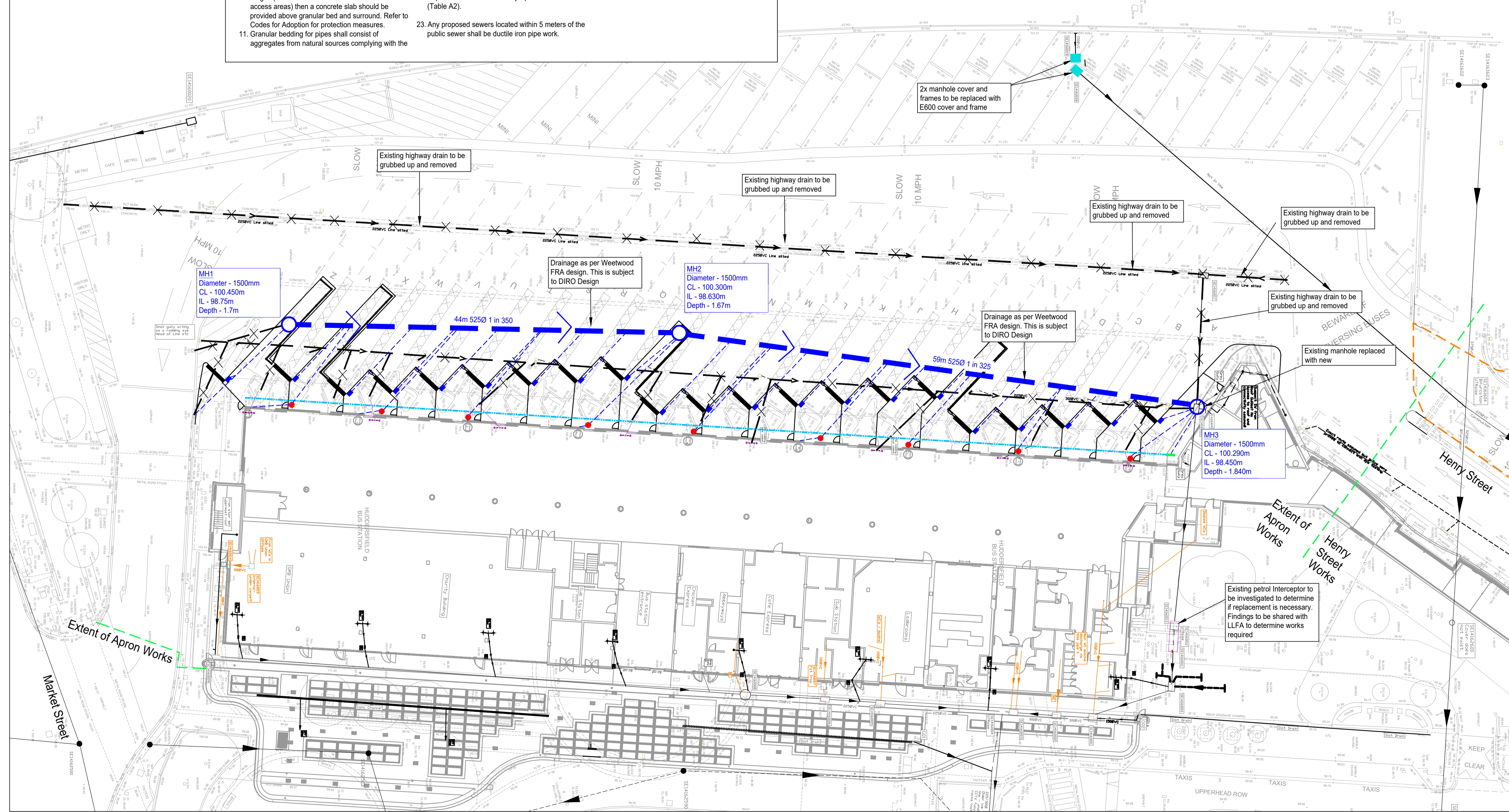
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**Key:**

- Highway Boundary Taken from Kirklee's Registry Plan
- New Class D400 side inlet gully pot, grate, frame and 150mm Ø connection to be provided.
- Existing sww SWS
- Existing Surface Water Sewer
- Existing Highway Drain to be grubbed up and removed
- Proposed Surface Water Manhole
- Proposed Surface Water Sewer
- Aco Brickslot RainDrain Slot Drain Sump Unit 500mm
- Aco Brickslot RainDrain Slot Drain Channel
- Existing manhole covers to be replaced with E600 manhole cover and frame
- Catchpit manhole



P05	07/08/24	Updated drawing number	VL	JP	NB
P04	30/07/24	Updated petrol interceptor note	VL	JP	NB
P03	26/06/24	Updated to WYCA Comments	VL	JP	NB
P02	16/05/24	Updated DIRO Layout and Internal Layout	VL	JP	NB
P01	04/04/24	First Issue	VL	JP	NB
Rev:	Date:	Amendment:	DRN	CHK	APR

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Client: Willmott Dixon Construction

Status: FOR APPROVAL

Scale: 1:250 Drawn: VL Chkd: JP Appvd: NB  
Size: A1 - 841 x 594

Project: Huddersfield Bus Station

Title: Apron Layout Drainage

Revision No: HBS-BGH-Z0-XX-D-C-0012 Revision: P05  
Job No: 23-184 Date: 04/04/24

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